RACU ACTIVATION

    1. <u>VERIFY FGB COMMAND STATUS</u>

> NOTE
> RACU commands sent from orbiter will not work if FGB relay matrix is in **MCC-M** command state (COMMANDING - INH). Crew can follow ground activities using the "If ENA" block below.

CRT   SM 204 FGB

      √COMMANDING - INH

    2. If COMMANDING - INH
        Shuttle ⇓ **MCC-H**: "Ready for RACU5(6) Power On."
        MCC-H ⇒ **MCC-M**: "Go for RACU5(6) Power On."

RUSSIAN GROUND	<u>AOS</u>	<u>LOS</u>
Pass 1	___/___:___:___	___/___:___:___
Pass 2	___/___:___:___	___/___:___:___

        MCC-M ⇒ **MCC-H** ⇑ shuttle: "RACU5(6) Power On at
        ___/___:___:___ GMT."

    3. If COMMANDING - ENA
        Shuttle ⇓ **MCC-H**: "Ready for RACU5(6) Power On."
        MCC-M ⇒ **MCC-H**: "Go for RACU5(6) Power On."
        MCC-H ⇑ shuttle: "Go for RACU5(6) Power On."

        On MCC GO

CRT   SM 204 FGB

PCS   nav FGB: EPS
               FGB: EPS

       √FGB Main Bus Voltage 1,2 (two): 28.0 --- 29.0 V
       √FGB Batt Voltage 1 --- 6 (six) > 25.5 V

```
* ************************************************** *
*  If any FGB Batt Voltage < 25.5 Volts, then    *
*      Notify MCC:  "FGB Batteries Low."         *
*      Wait 1 orbit for FGB batteries to charge. *
* ************************************************** *
```

CRT   SM 210 NODE

        √FRM CTR - Incrementing

     If FRM CTR - Static

        SM 204 FGB

        RACU 5(6) PWR ON VIA FGB - ITEM 1 (ITEM 3) EXEC
        √RACU 5(6) Power On - *
        √Input Amps > 3.0 A
        √Output Volts: 121 --- 125 V
                √Amps: 0.3 --- 10 A

        +---+
        | NOTE |
        | Amperage should be at 0.5 amps at power On. |
        | Amperage could be as high as 10 amps after |
        | MDM initialization (approximately 2.5 minutes), |
        | depending on heater usage. |
        +---+

        ****
        * If RACU 5(6) OUT AMPS > 10   *
        *   RACU 5(6) PWR OFF VIA FGB - ITEM 5 *
        *   (ITEM 7) EXEC   *
        ****

     If FRM CTR - Incrementing

        SM 204 FGB

        RACU 5(6) PWR ON VIA NCS - ITEM 2 (ITEM 4) EXEC
        √RACU 5(6) Power On - *
        √Input Amps > 3.0 A
        √Output Volts: 121 --- 125 V
                √Amps: 0.3 --- 10 A

        +---+
        | NOTE |
        | Amperage should be at 0.5 amps at power On. |
        | Amperage could be as high as 10 amps after |
        | MDM initialization (approximately 2.5 minutes), |
        | depending on heater usage. |
        +---+

        ****
        * If RACU 5(6) OUT AMPS > 10   *
        *   RACU 5(6) PWR OFF VIA FGB - ITEM 6 *
        *   (ITEM 8) EXEC   *
        ****

PCS

```
nav FGB: EPS
 FGB: EPS

 sel   RACU Details
 sel   Commands
 cmd  FGB RACU5(6) - On  Execute
√RACU 5(6) Converter - On
√RACU 5(6) Converter Input Current > 3.0 A
                        √Output Current:  0.5 --- 10 A
                           Voltage:  121 --- 125 V

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 │                  NOTE                      │
 │ Amperage should be at 0.5 amps at power On.│
 │ Amperage could be as high as 10 amps after │
 │ MDM initialization (approximately 2.5 minutes),│
 │ depending on heater usage.                 │
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 *************************************************
 *  If RACU 5(6) Output Current > 10          *
 *      sel   Commands                         *
 *       cmd FGB RACU 5(6) - Off  Execute *
 *************************************************
```